INTERNATIONALSEARCHREPORT

International application No. PCT/JP2005/011388

A. CLASSIFICATION OF SUBJECT MATTER

IntCl. 7 H01L21/02, 21/20, 27/12, 33/00,

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.7 H01L21/02,

21/20-21/208,

27/12, 33/0

H01S5/323

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2005

H01S5/323

Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2005
Registered utility model specifications of Japan 1996-2005
Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2003-78117 A (CANON KABUSHIKI KAISHA) 2003.03.14,	1-16, 22-23, 25-28, 30
Y	[0158] -[0174], [0087], figures 5A-5B	24, 29, 31
A	(Family: none)	17-21
х	JP 2001-192300 A (SHARP KABUSHIKI KAISHA) 2001.07.17, [0018]-[0035] , figure 1 (Family: none)	1, 3, 6-8, 10-16
Y	JP 2002-280531 A (DENSO Corporation) 2002.09.27, [0029]-[0033], figure 3 (Family: none)	24, 29

w	Further documents are listed in the continuation of Box C.	Г	See patent family annex.	
national filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later			priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
		"&"		
Date	of the actual completion of the international search 15.09.2005	Date	of mailing of the international search repo	
Name and mailing address of the ISA/JP Japan Patent Office			horized officer nokazu Hayakawa	4M 9733

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INTERNATIONALSEARCHREPORT

International application No.
PCT/JP2 005/01138 8

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Υ .	JP 2004-119807 A (NICHIA CHEMICAL INDUSTRIES, LTD.) 2004.04.15 See whole document, figures 4-5 (Family: none)		
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